

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants : Peter D. Kwong et al.

Serial No. : 09/856,200

Filed : January 3, 2003

For : CRYSTAL COMPRISING HUMAN  
IMMUNODEFICIENCY VIRUS ENVELOPE  
GLYCOPROTEIN GP120, COMPOUNDS INHIBITING  
CD4-GP120 INTERACTION, COMPOUNDS  
INHIBITING CHEMOKINE RECEPTOR-GP120  
INTERACTION, MIMICS OF CD4 AND GP120  
VARIANTS

1185 Avenue of the Americas  
New York, New York 10036  
November 2, 2004

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

INFORMATION DISCLOSURE STATEMENT

In accordance with their duty of disclosure under 37 C.F.R. §1.56 and 37 C.F.R. §1.97, applicants would like to direct the Examiner's attention to the following publications which are listed on the attached Form PTO-1449 (**Exhibit A**). Copies of cited publications 1-8 are attached hereto as **Exhibits 1-8** respectively.

1. Rini, James M. et al. Crystal structure of a human immunodeficiency virus type 1 neutralizing antibody, 50.1, in complex with its V3 loop peptide antigen. Proceedings of the National Academy of Sciences of the United States, Vol. 90, No. 13, 6325-6329 (1993); (**Exhibit 1**)

Applicants : Peter D. Kwong et al.  
U.S. Serial No. : 09/856,200  
Filed : January 3, 2003  
Page 2

2. Ghiara, J.B. et al. Structure-based design of a constrained peptide mimic of the HIV-1 V3 loop neutralization site. *Journal of Molecular Biology*, Vol. 266, No. 1, 31-39 (1997); (**Exhibit 2**)
3. Stura, E.A. et al. Crystallization, Sequence and Preliminary Crystallographic Data For An Antipeptide FAB 50.1 and Peptide Complexes With The Principal Neutralizing Determinant of HIV-1 GP120. *Proteins: Structure, Function, and Genetics*, Vol. 14, No. 4, 499-508 (1992); (**Exhibit 3**)
4. Oxford, J.S. et al. New Scientific Developments Towards and AIDS Vaccine: report on a workshop organized by EU programme EVA entitled Novel approaches to AIDS vaccine development held at the Institut Pasteur, Paris. *Vaccine*, Vol. 14, No. 17, 1712-1717 (1996); (**Exhibit 4**)
5. Sanejouand, Y-H. On the role of CD4 conformational change in the HIV-cell fusion process. *Comptes Rendus Des Seances De L'Academie Des Sciences. Serie III. Sciences De La Vie*, Vol. 320, No. 2, 163-170 (1997); (**Exhibit 5**)
6. Wyatt, R. et al. The Antigenic Structure of the HIV gp120 Envelope Glycoprotein. *Nature*. Vol. 393, 705-711 (1998); (**Exhibit 6**)
7. Kwong, P. D. et al. Structure of an HIV gp120 Envelope Glycoprotein in Complex with the CD4 Receptor and a Neutralizing Human Antibody. *Nature*,

Applicants : Peter D. Kwong et al.  
U.S. Serial No. : 09/856,200  
Filed : January 3, 2003  
Page 3

Vol. 393, 648-659 (1998); (**Exhibit 7**) and

8. Partial European Search Report, August 5, 2004 from European Patent Office on European Patent Application No. EP 98959406.4 (**Exhibit 8**).

Pursuant to 37 C.F.R. §1.97(b)(3) no fee is deemed necessary in connection with the filing of this Information Disclosure Statement. However, if any fee is required, authorization is hereby given to charge the amount of any such fee to Deposit Account No. 03-3125.

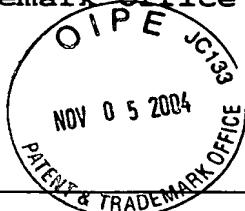
Respectfully submitted,

John P. White  
Registration No. 28,678  
Alan J. Morrison  
Registration No. 37,399  
Attorneys for Applicants  
Cooper & Dunham LLP  
1185 Avenue of the Americas  
New York, New York 10036  
Tel. No. (212) 278-0400

I hereby certify that this correspondence is being deposited this date with the U.S. Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450

11/20/07  
Alan J. Morrison Date  
Reg. No. 37,399

Form PTO-1449

U.S. Department of Commerce  
Patent and Trademark OfficeINFORMATION DISCLOSURE STATEMENT  
(Use several sheets if necessary)

Atty. Docket No. 54203-H-PCT-US /JPW/AJM/NS	Serial No. 09/856,200
Applicants Peter D. Kwong et al.	
Filing Date January 3, 2003	Group

## U.S. PATENT DOCUMENTS

Examiner Initial	Document Number	Date	Name	Class	Subclass	Filing Date if Appropriate

## FOREIGN PATENT DOCUMENTS

	Document Number	Date	Country	Class	Subclass	Translation	
						Yes	No

## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

1	Rini, James M. et al. Crystal structure of a human immunodeficiency virus type 1 neutralizing antibody, 50.1, in complex with its V3 loop peptide antigen. Proceedings of the National Academy of Sciences of the United States, Vol. 90, No. 13, 6325-6329 (1993); (Exhibit 1)
2	Ghiara, J.B. et al. Structure-based design of a constrained peptide mimic of the HIV-1 V3 loop neutralization site. Journal of Molecular Biology, Vol. 266, No. 1, 31-39 (1997); (Exhibit 2)

EXAMINER

DATE CONSIDERED

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Peter D. Kwong, et al.  
U.S. Serial No. 09/856,200  
Filed: January 3, 2003

Exhibit A

Form PTO-1449

U.S. Department of Commerce  
Patent and Trademark OfficeAtty. Docket No.  
54203-H-PCT-US  
/JPW/AJM/NSSerial No.  
09/856,200INFORMATION DISCLOSURE STATEMENT  
(Use several sheets if necessary)Applicant  
Peter D. Kwong et al.Filing Date  
January 3, 2003

Group

## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

3	Stura, E.A. et al. Crystallization, Sequence and Preliminary Crystallographic Data For An Antipeptide FAB 50.1 and Peptide Complexes With The Principal Neutralizing Determinant of HIV-1 GP120. Proteins: Structure, Function, and Genetics, Vol. 14, No. 4, 499-508 (1992); (Exhibit 3)
4	Oxford, J.S. et al. New Scientific Developments Towards and AIDS Vaccine: report on a workshop organized by EU programme EVA entitled Novel approaches to AIDS vaccine development held at the Institut Pasteur, Paris. Vaccine, Vol. 14, No. 17, 1712-1717 (1996); (Exhibit 4)
5	Sanejouand, Y-H. On the role of CD4 conformational change in the HIV-cell fusion process. Comptes Rendus Des Seances De L'Academie Des Sciences. Serie III. Sciences De La Vie, Vol. 320, No. 2, 163-170 (1997); (Exhibit 5)
6	Wyatt, R. et al. The Antigenic Structure of the HIV gp120 Envelope Glycoprotein. Nature. Vol. 393, 705-711 (1998); (Exhibit 6)
7	Kwong, P. D. et al. Structure of an HIV gp120 Envelope Glycoprotein in Complex with the CD4 Receptor and a Neutralizing Human Antibody. Nature, Vol. 393, 648-659 (1998); (Exhibit 7) and
8	Partial European Search Report, August 5, 2004 from European Patent Office on European Patent Application No. EP 98959406.4 (Exhibit 8).

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.